

# PATENT COOPERATION TREATY

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**IPLD MENLO PARK**

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY  
(PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

ELGOSS-~~WO~~ <sup>PCT</sup>

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/US2004/016908

International filing date (day/month/year)  
26.05.2004

Priority date (day/month/year)  
24.06.2003

International Patent Classification (IPC) or both national classification and IPC  
G06F3/033

Applicant  
ELO TOUCHSYSTEMS, INC.

**DOCKETED**  
02/16/05 km

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

## 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**International application No.  
PCT/US2004/016908**IAP20 Rec'd PCT/PTO 22 DEC 2005****Box No. I Basis of the opinion**

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material:  
☐ in written format  
☐ in computer readable form
  - c. time of filing/furnishing:  
☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/US2004/016908

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**Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes: Claims	1-21
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-21
Industrial applicability (IA)	Yes: Claims	1-21
	No: Claims	

**2. Citations and explanations**

**see separate sheet**

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING  
AUTHORITY (SEPARATE SHEET)**

IAP20 Rec'd International application No. 2005

PCT/US2004/016908

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1 Reference is made to the following documents:

- D1: WO 98/29853 A1 (ELO TOUCHSYSTEMS, INC; KAMBARA, SHIGEKI;  
KANEDA, HIROSHI; ADLER, ROBER) 9 July 1998 (1998-07-09)  
D2: US 2002/104691 A1 (KENT JOEL ET AL) 8 August 2002 (2002-08-08)

2 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of the claims does not involve an inventive step in the sense of Article 33(3) PCT.

The document D1 is regarded as being the closest prior art to the subject-matter of claim 1 and discloses a touch sensor (column 6, lines 37,38 - "transducer system for an acoustic touchscreen"), comprising an acoustic substrate having a surface (column 6, line 45 - "substrate.....surface"), an acoustic transducer (column 6, lines 38,39 - "acoustically emissive element") and an acoustically diffractive grating (column 6, line 40 - "grating structure"), the diffractive grating coupling acoustic energy within the acoustic transducer to an acoustic wave propagating along the surface of the substrate (column 6, lines 42-46 - "Thus, a bulk wave.....one surface." See also column 25, line 53 - column 26, line 20, and fig.10.).

The subject-matter of claim 1 therefore differs from this in that the diffractive grating is disposed between the substrate and the transducer.

The problem to be solved by the present invention may therefore be regarded as how to retrofit an acoustic touch sensor system to a substrate when it is only possible to access the substrate from one side, viz. the "touch" side.

The solution proposed in claim 1 of the present application cannot be considered as involving an inventive step (Article 33(3) PCT) because the skilled person would be left with no option but to mount both the transducer and the diffraction grating on the "touch" side of the device in the manner of claim 1. Further, in the

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AUTHORITY (SEPARATE SHEET)**

International application No.

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closely related field of wedge transducers, the transducer is mounted on the "touch" side of the device. See D2, §79.

- 3 Claim 11 contains all the features of claim 1 and is therefore dependent on that claim.
- 4 Dependent claims 2-21 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step.